

Work Order ID 54461

December 9, 2009 12:42:19 PM



Page 1

Item ID: D3990-1

Accept



Setup Start



Revision ID:

Stop



Item Name: Cable Guard

Start Date: 09/12/2009 Start Qty: 5.00



Cost Item ID:

Required Date: 16/12/2009 Req'd Qty: 5.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

R

Date:

09-12-9

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3990

A

100

0.00



Waterjet

FLOW CNC Waterjet

Memo

Cut Blank as per File d3990-1-blank

0.00

B 9-12-11

7

110

0.00



HAAS 1

HAAS CNC vertical machine #1

Memo

Machine as per Folio FA845

Folio Rev: *4A*

Dwg Rev: *A*

Deburr as per Dwg

0.00

sub 09/12/21

7 0

770

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D 3990-1 PAR #: N/A Fault Category: Prod-Eng. Control NCR: Yes No DQA: LA Date: 10-01-05
 Resolution: accepted Disposition: use as is QA: N/C Closed: _____ Date: _____

NCR: <u>54461</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
<u>09/12/21</u>	<u>110</u>	<u>1 part, the two counter bore are too wide of .010" over tolerance. R.C. program error.</u>	<u>[Signature]</u>	<u>parts acceptable - adjust the program</u>	<u>JFS. 09/12/21</u>	<u>[Signature]</u> <u>09/12/21</u>	<u>[Signature]</u>	<u>[Signature]</u> <u>05-12-21</u>

NOTE: Date & initial all entries

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Item ID: D3990-1

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Item Name: Cable Guard

Start Date: 09/12/2009 Start Qty: 5.00



Cust Item ID:

Required Date: 16/12/2009 Req'd Qty: 5.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 QC Quality Control	QC2- Inspect parts off machine FAI/FAIB Memo	0.00 0.00		<i>ml 09/12/21</i>		<i>7</i>	<i>0</i>		
130 QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00		<i>H.A 09/12/29</i>		<i>7</i>	<i>0</i>		
140 Packaging Packaging	Identify as per dwg & Stock Location: _____ Memo	0.00 0.00				<i>9/12/30</i>		<i>7x SP</i>	

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Item ID: D3990-1

Accept



Setup Start



Revision ID:

Stop



Item Name: Cable Guard

Start Date: 09/12/2009 Start Qty: 5.00



Cust Item ID:

Required Date: 16/12/2009 Req'd Qty: 5.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

150

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

u 09.12.30

Picklist Print

Page 1

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Work Order ID: 54461



Parent Item: D3990-1



Parent Item Name: Cable Guard

Start Date: 09/12/2009

Required Date: 16/12/2009

Comments: IPP RevA: New issue 09.09.15 DD verified by:EC

Start Qty: 5.00

Required Qty: 5.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MUHMWB1750X1000 X4800		Purchased		No		100	sf	0.0000	9.2105	12.90		
										12.90	18 9-12-11	
UHMW 1.75x1.00x48.00										M109126		

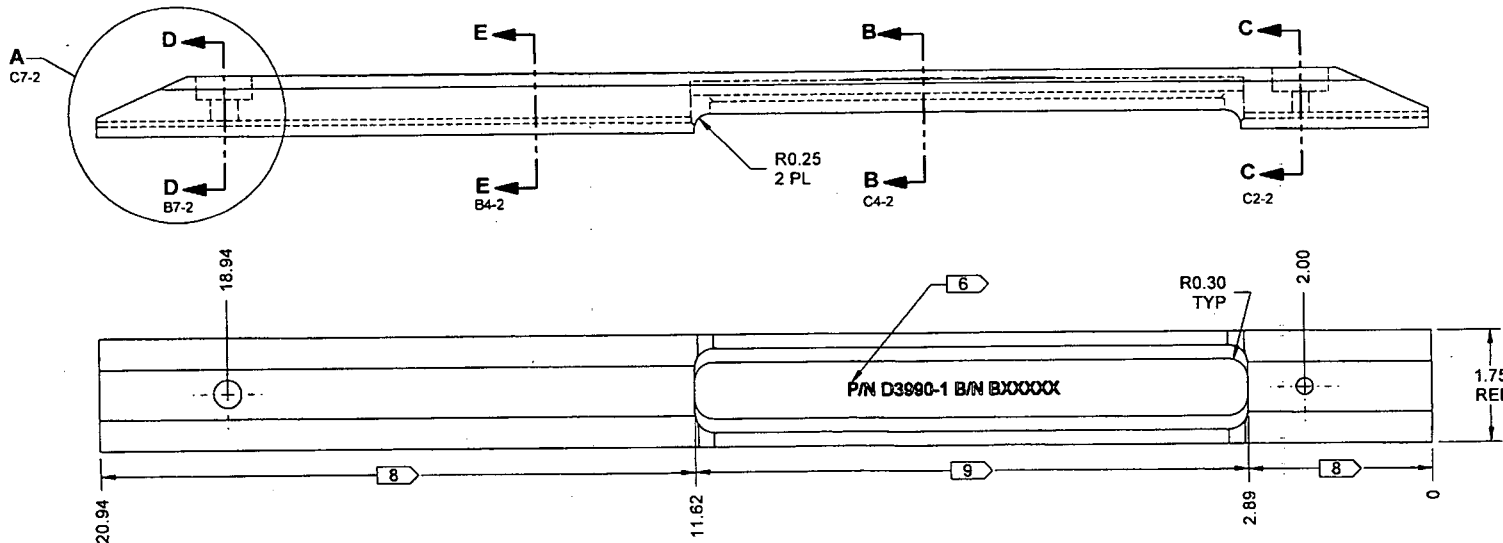
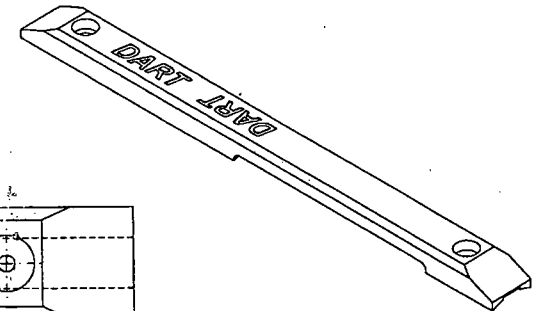
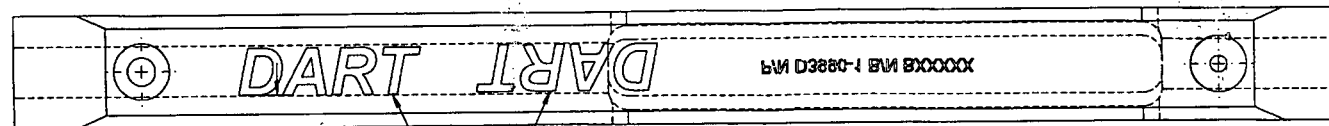
DART AEROSPACE LTD		Work Order:	54461
Description: Cable Guard		Part Number:	D3990-1
Inspection Dwg: D3990 Rev: A		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
20.94	+/-0.030	20.94	✓			
11.62	+/-0.030	11.636	✓			
2.89	+/-0.030	2.906	✓			
1.75 REF	+/-0.030	1.75	✓			
2.00	+/-0.030	2.025	✓			
18.94	+/-0.030	18.960	✓			
0.5	+/-0.100	.485	✓			
0.65	+/-0.030	.635	✓			
0.88	+/-0.030	.884	✓			
1.31	+/-0.030	1.314	✓			
0.14	+/-0.030	.140	✓			
0.36	+/-0.030	.359	✓			
0.10	+/-0.030	.110	✓			
Ø0.875	+/-0.010	Ø.880	✓			
0.37	+/-0.030	.375	✓			
0.95	+/-0.030	.940	✓			
0.70	+/-0.030	.695	✓			
0.78	+/-0.030	.783	✓			
Ø0.261	+0.006/-0.001	Ø.260	✓			
Ø0.875	+/-0.010	Ø.880	✓			
0.37	+/-0.030	.372	✓			
0.70	+/-0.010	.695	✓			
0.95	+/-0.030	.940	✓			
0.78	+/-0.030	.783	✓			
Ø0.438	+0.006/-0.001	Ø.438	✓			
1.75	+/-0.030	1.752	✓			
0.70	+/-0.030	.695	✓			
0.95	+/-0.030	.940	✓			
0.78	+/-0.030	.783	✓			
R2.0	+/-0.100	R2.00	✓			

Measured by: BS [Signature]	Audited by: H.A	Prototype Approval:	N/A
Date: 9-12-11 09/12/29	Date: 09/12/29	Date:	N/A
Rev	Date	Change	Revised by Approved
A	09.11.11	New Issue	KJ [Signature] [Signature]



D3990-1 CABLE GUARD

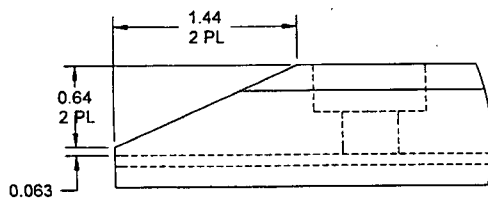
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 34461

110412-9

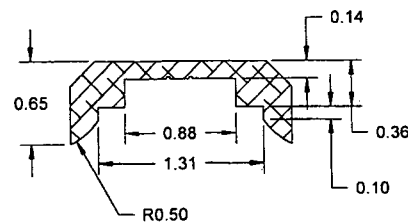
RELEASED
2009-09-10

- NOTES:
- MATERIAL: UHMW BLACK TIVAR 1000 VIRGIN MATERIAL PER SPEC CONTROL DWG D2689
 - FINISH: N/A
 - TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - UNITS: INCHES UNLESS OTHERWISE NOTED
 - BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - IDENTIFICATION: ENGRAVE WITH DART P/N "D3990-1" AND B/N TO MAX DEPTH OF 0.015 AND MIN TOOL TIP RAD 0.25
 - WEIGHT: 0.63 lbs
 - MACHINE CONSTANT SECTION E-E, EXCEPT FOR DETAIL A
 - MACHINE CONSTANT SECTION B-B, EXCEPT FOR TRANSITIONS
 - 1) ENGRAVE "DART" LOGO ON UPPER SIDE TO MAX DEPTH OF 0.015 AND MIN TOOL TIP RAD 0.25, 2 PL

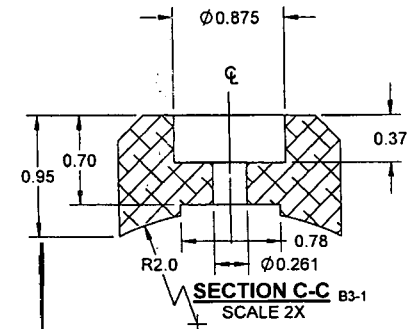
A NEW ISSUE		BY		09.08.28
REV.		DESCRIPTION		DATE
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
DRAWN				
CHECKED		DRAWING NO. D3990		REV. A
MFG. APPR.		TITLE		SHEET 1 OF 2
APPROVED		CABLE GUARD		SCALE
DE APPR.				NTS
DATE 09.08.28		COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD		



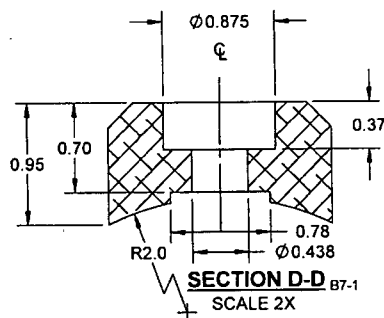
DETAIL A C8-1
SCALE 2X



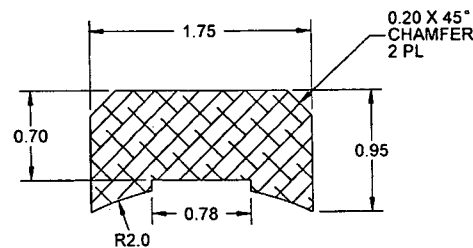
SECTION B-B B5-1
SCALE 2X



SECTION C-C B3-1
SCALE 2X



SECTION D-D B7-1
SCALE 2X



SECTION E-E B6-1
SCALE 2X

RELEASED
2009-08-10

W/O 54461

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO. D3990	REV. A
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